

Occurrence and Distribution of Land Snails of the Family Polygyridae (Mollusca: Gastropoda: Pulmonata) in West Virginia

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ABSTRACT.— Twenty-four species in the family Polygyridae were collected in West Virginia. *Mesodon inflectus* and *Stenotrema barbigerum* are reported from the state for the first time, and additional records are also reported for other species of polygyrid snails. Results of this study are compared with those of previously reported studies.

INTRODUCTION

The polygyrid gastropods of West Virginia have been discussed with varying degrees of detail in several works. Pilsbry's (1940) major study of North American land snails contained many county records for West Virginia polygyrid species, although it provided little information on specific collection sites. Brooks and MacMillan (1940) and MacMillan (1949) presented more precise distributional lists. Many polygyrid taxa have since been described from the state (Grimm 1971; Hubricht 1976), and new county and state distribution records have been published (Grimm 1974; Taylor and Counts 1976). Many of the species included in these works have been placed in synonymy (Burch 1962; Grimm 1974; Hubricht 1974), creating some confusion as to which species are present in the state. In addition, gaps still exist in our knowledge of West Virginia's polygyrid fauna.

This paper summarizes the occurrence and distribution of this group of land snails in West Virginia, and presents new locality data and species reports.

MATERIALS AND METHODS

Both live snails and empty shells were collected from several localities in each of the 55 counties of West Virginia, during the period September 1975 through December 1976. Animals were identified to species or subspecies using Burch (1962) or Burch and Patterson (1966). Descriptions in these keys were compared with those of Pilsbry (1940) and MacMillan (1949). Some identifications were made or confirmed by Mr. Leslie Hubricht, Meridian, Mississippi.

Voucher specimens were deposited in the collections of the Museum of Comparative Zoology, Harvard University; the Delaware Museum of Natural History, Greenville; the Marshall University Malacological Col-

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lection (MUMC) of the N. Bayard Green Museum of Zoology; and Mr. Leslie Hubricht's collection.

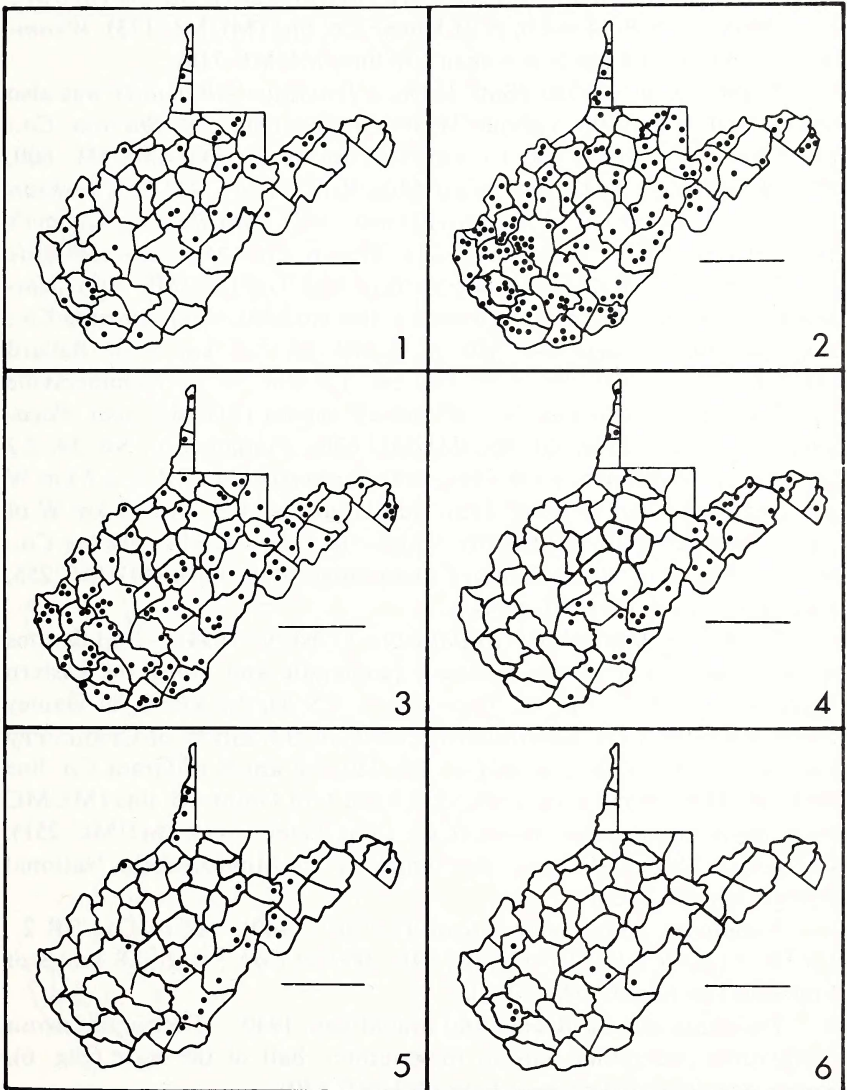
Locality data from the collections were compared with and added to those in the available literature on West Virginia land snails, and the results plotted on county maps of the state. Published localities that I did not visit or where I failed to find the reported species were not plotted. Species not previously reported from West Virginia in the literature are designated new state records.

RESULTS

Twenty-four polygyrid species were found in West Virginia and are discussed in the following accounts. Previously unpublished localities are provided by county. MUMC accession numbers are given for each collection.

Triodopsis denotata (Deshayes, 1830).—*Triodopsis denotata* was found in widely separated populations throughout the state (Fig. 1). *Mason Co.*: McClintic Wildlife Refuge Station (MUMC 50).

Triodopsis tridentata (Say, 1816).—This species was found in all but Berkeley, Hancock, Pleasants, Tyler, and Upshur counties (Fig. 2). *Boone Co.*: West Virginia State Route (SR) 3, 3.4 km E of US 119 (MUMC 491); US 119, 1 km S of Kanawha Co. line (MUMC 485); SR 3, 4.6 km E of US 119 (MUMC 494). *Cabell Co.*: SR 2, 1.6 km E of Huntington (MUMC 3); 8342 Big Seven Mile Rd. (MUMC 41, 55, 57); Ona (MUMC 545). *Fayette Co.*: US 60, 7.5 km W of Gauley Bridge (MUMC 217). *Jackson Co.*: SR 35, 3.5 km E of Putnam Co. line (MUMC 127); US 33, 7.2 km E of Ripley (MUMC 153). *Kanawha Co.*: Nitro (MUMC 120). *Lincoln Co.*: SR 10, 3.2 km W of West Hamlin (MUMC 89); Alkol (MUMC 449). *Logan Co.*: Big Creek (MUMC 388); Chief Logan State Park (MUMC 585). *Mason Co.*: McClintic Wildlife Refuge Station (MUMC 60). *McDowell Co.*: US 52, 9.6 km W of Welch (MUMC 703). *Mercer Co.*: Flat Top (MUMC 302). *Mineral Co.*: US 50, 9.1 km E of Grant Co. line (MUMC 472, 479). *Mingo Co.*: Grey Eagle (MUMC 536). *Nicholas Co.*: SR 39, 1.6 km W of Summersville (MUMC 234); SR 39, 4 km W of Richwood (MUMC 418). *Ohio Co.*: SR 2, 1.6 km E of Warwood (MUMC 259). *Pendleton Co.*: Mouth of Seneca (MUMC 625). *Pocahontas Co.*: SR 39, east entrance to Monongahela National Forest (MUMC 210). *Putnam Co.*: Hurricane (MUMC 71, 84); Clymer's Creek Rd. off SR 34, 3 km N of Kanawha River (MUMC 152). *Raleigh Co.*: Slab Fork (MUMC 345); SR 3, 37 km N of Daniels (MUMC 529); Beaver (MUMC 566). *Randolph Co.*: Gladly Fork (MUMC 19); US 33, 20.8 km W of Elkins (MUMC 459). *Roane Co.*: US 33, 5.6 km E of Jackson Co. line (MUMC 137). *Summers Co.*: SR 3, 2.6 km W of Jumping Branch (MUMC 511). *Tucker Co.*: Dolly



Figs. 1-6. County distributions of *Triodopsis* in West Virginia. Horizontal scale bar in all figures = 100 km. 1, *T. denotata*; 2, *T. tridentata*; 3, *T. albolabris*; 4, *T. fraudulententa fraudulententa*; 5, *T. f. vulgata*; 6, *T. rugosa*.

Sods (MUMC 570); Lanesville (MUMC 596). *Wayne Co.*: Lavalette (MUMC 98); Cabwaylingo State Park (MUMC 201); Shoals (MUMC 563). *Wirt Co.*: SR 14, 4 km N of Roane Co. line (MUMC 173). *Wyoming Co.*: SR 10, 4.8 km S of Logan Co. line (MUMC 719).

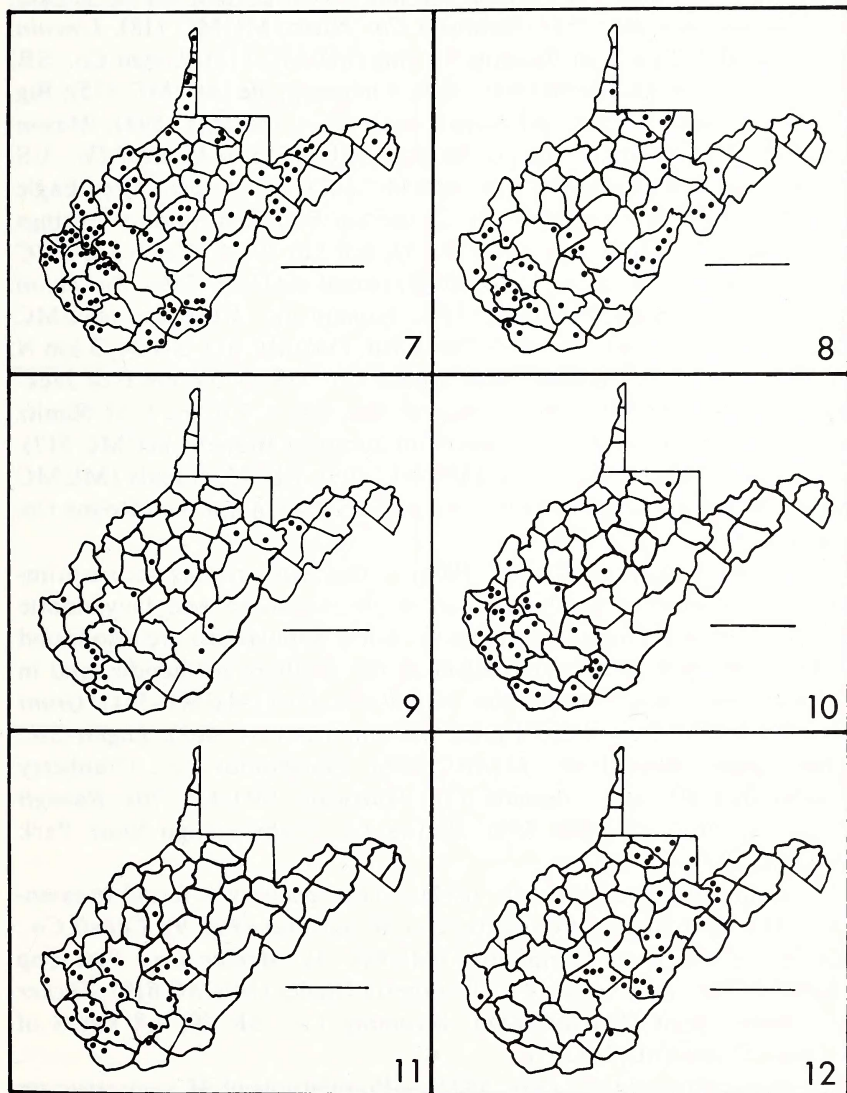
* *Triodopsis albolabris* (Say, 1816).—*Triodopsis albolabris* was also widely distributed throughout West Virginia (Fig. 3). *Braxton Co.*: Interstate (I) Highway 79, 1.6 km S of Burnsville exit (MUMC 600, 602). *Cabell Co.*: 8342 Big Seven Mile Rd. (MUMC 45, 53). *Jackson Co.*: US 33, 7.2 km E of Ripley (MUMC 155). *Lincoln Co.*: Clymer's Creek Rd. off SR 34 (MUMC 83). *Mason Co.*: McClintic Wildlife Refuge Station (MUMC 61). *Mercer Co.*: Flat Top (MUMC 309). *Mineral Co.*: US 50, 9.1 km E of Grant Co. line (MUMC 466). *Monroe Co.*: Red Sulphur Springs (MUMC 523); SR 12, 3.2 km S of Ballard (MUMC 526). *Nicholas Co.*: SR 39, 1.6 km W of Summersville (MUMC 228). *Pendleton Co.*: Mouth of Seneca (MUMC 626). *Pocahontas Co.*: Cranberry Glades (MUMC 620). *Putnam Co.*: SR 34, 2.2 km N of Kanawha River (MUMC 145). *Summers Co.*: SR 3, 2.7 km W of Jumping Branch (MUMC 513). *Randolph Co.*: US 33, 22.8 km W of Elkins (MUMC 460). *Tucker Co.*: Lanesville (MUMC 614). *Wayne Co.*: SR 75, Lavalette (MUMC 105); Cabwaylingo State Park (MUMC 255, 296); Beech Fork (MUMC 640).

Triodopsis fraudulentata fraudulentata (Pilsbry, 1894).—Populations of this snail occur in the northern panhandle and along the eastern border of the state (Fig. 4). *Fayette Co.*: US 60, 7.5 km W of Gauley Bridge (MUMC 215). *Greenbrier Co.*: SR 39, 9.6 km W of Cranberry Glades (MUMC 623). *Hardy Co.*: US 220, 1.6 km N of Grant Co. line (MUMC 583). *Mineral Co.*: US 50, 9.1 km E of Grant Co. line (MUMC 471). *Ohio Co.*: County Road (CR) 25 at Petes Creek (MUMC 251). *Pocahontas Co.*: SR 39 at east entrance to Monongahela National Forest (MUMC 205).

Triodopsis fraudulentata vulgata (Pilsbry, 1940).—*Ohio Co.*: SR 2, 1.6 km E of Warwood (MUMC 260). *Wetzel Co.*: SR 2, 0.8 km S of Marshall Co. line (MUMC 271).

Triodopsis rugosa Brooks and MacMillan, 1940.—*Triodopsis rugosa* populations are found only in the southern half of the state (Fig. 6). *Pocahontas Co.*: Hills Creek Falls (MUMC 630).

Mesodon thyroidus (Say, 1816).—This species was found in all but Fayette, Gilmer, Harrison, Morgan, Pendleton, Pleasants, Pocahontas, Raleigh, and Upshur counties (Fig. 7). *Boone Co.*: SR 3, 3.4 km E of US 119 (MUMC 433); SR 3, 4.6 km E of US 119 (MUMC 496). *Braxton Co.*: Burnsville (MUMC 601). *Brooke Co.*: Bethany (MUMC 275). *Cabell Co.*: 8342 Big Seven Mile Rd. (MUMC 38, 44, 52, 54, 56); SR 10, 7 km N of West Hamlin (MUMC 544). *Clay Co.*: Elkhurst (MUMC



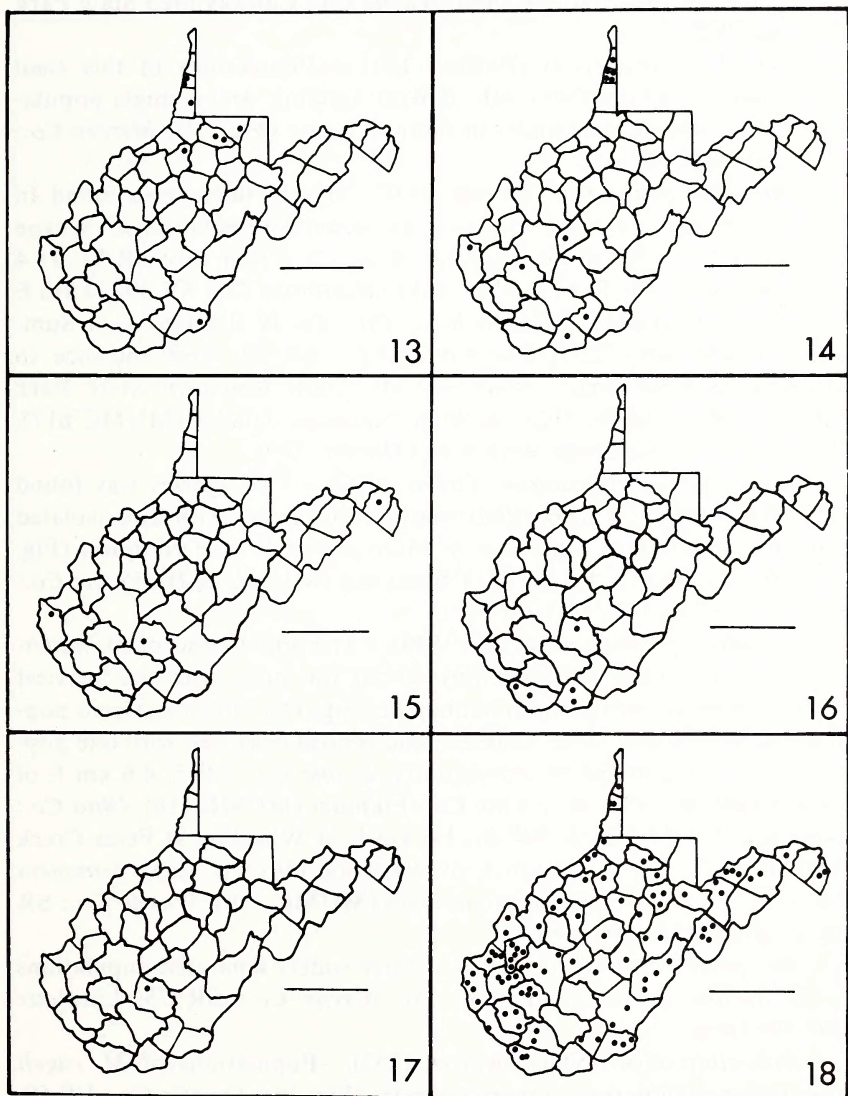
Figs. 7-12. County distributions of *Mesodon* in West Virginia. 7, *M. thyroidus*; 8, *M. sayanus*; 9, *M. zaletus*; 10, *M. appressus*; 11, *M. perigraptus*; 12, *M. dentiferus*.

115). *Hancock Co.*: SR 2, 3.8 km N of Weirton (MUMC 284). *Jackson Co.*: SR 35, 3.5 km E of Putnam Co. line (MUMC 128); US 33, 5.6 km E of Ripley (MUMC 154). *Kanawha Co.*: Nitro (MUMC 118). *Lincoln Co.*: SR 34, 3.2 km S of Putnam Co. line (MUMC 112). *Logan Co.*: SR 10, 4.3 km E of Davin (MUMC 389); Chapmanville (MUMC 575); Big Creek (MUMC 577); Chief Logan State Park (MUMC 594). *Mason Co.*: McClintic Wildlife Refuge Station (MUMC 59). *Mineral Co.*: US 50, 9.1 km E of Grany Co. line (MUMC 567). *Mingo Co.*: Grey Eagle (MUMC 535). *Monroe Co.*: SR 12, 0.2 km S of Red Sulphur Springs (MUMC 522). *McDowell Co.*: US 52, 9.6 km W of Welch (MUMC 702). *Ohio Co.*: SR 2, 1.6 km E of Warwood (MUMC 256). *Pendleton Co.*: Mouth of Seneca (MUMC 627). *Putnam Co.*: Hurricane (MUMC 72); SR 34 off US 60, Clymer's Creek Rd. (MUMC 81); SR 34, 3 km N of Kanawha River (MUMC 144). *Roane Co.*: US 33, 5.6 km E of Jackson Co. line (MUMC 136). *Summers Co.*: SR 3, 2.6 km E of Nimitz (MUMC 505, 507); SR 3, 2.6 km W of Jumping Branch (MUMC 517). *Wayne Co.*: SR 75, Lavalette (MUMC 104); SR 75, Shoals (MUMC 562); Beech Fork (MUMC 638). *Wirt Co.*: SR 14, 4 km N of Roane Co. line (MUMC 174).

Mesodon sayanus (Pilsbry, 1906).—*Mesodon sayanus* occurs primarily in the eastern highlands, and in the Kanawha and Guyandotte river valleys of the southwest (Fig. 8). A few populations are also found in the floodplain of the Ohio River in the northern panhandle, and in the southwest corner of the state. *Cabell Co.*: Ona (MUMC 541). *Grant Co.*: SR 93, 11.3 km E of Tucker Co. line (MUMC 463). *Logan Co.*: Chief Logan State Park (MUMC 586). *Pocahontas Co.*: Cranberry Glades (MUMC 621). *Putnam Co.*: Hurricane (MUMC 70). *Raleigh Co.*: Slab Fork (MUMC 375). *Wayne Co.*: Cabwaylingo State Park (MUMC 289).

Mesodon zaletus (Binney, 1837).—This species was found in essentially the same distribution pattern as *M. sayanus* (Fig. 9). *Cabell Co.*: SR 2, 3.2 km E of Huntington (MUMC 1). *Mercer Co.*: Flat Top (MUMC 310). *Pocahontas Co.*: Cranberry Glades (MUMC 619). *Tucker Co.*: Dolly Sods (MUMC 569). *Wyoming Co.*: SR 10, 4.8 km S of Logan Co. line (MUMC 718).

Mesodon appressus (Say, 1821).—Populations of *M. appressus* are most heavily concentrated in the southeast, with a single northern population in Monongalia County (Fig. 10). *Boone Co.*: SR 3, 3.4 km E of US 119 (MUMC 424); Peytona (MUMC 489). *Cabell Co.*: 8342 Big Seven Mile Rd. (MUMC 38, 51). *Fayette Co.*: US 60, 7.5 km W of Gauley Bridge (MUMC 223). *Lincoln Co.*: SR 10, 3.2 km W of West Hamlin (MUMC 88); Alkol (MUMC 450). *Logan Co.*: Chief Logan State Park (MUMC 588). *Mingo Co.*: Grey Eagle (MUMC 534).



Figs. 13-17. County distributions of *Mesodon* in West Virginia. 13, *M. pensylvanicus*; 14, *M. mitchellianus*; 15, *M. clausus*; 16, *M. rugeli*; 17, *M. inflectus*. Fig. 18. County distribution of *Stenotrema hirsutum* in West Virginia.

Summers Co.: SR 3, 3.4 km E of Bluestone Dam (MUMC 500); SR 3, 2.6 km E of Nimitz (MUMC 504). *Wayne Co.*: Cabwaylingo State Park (MUMC 292).

Mesodon perigraptus (Pilsbry, 1894).—Populations of this snail were found in the southern half of West Virginia, and a single population in the eastern panhandle in Grant County (Fig. 11). *Mercer Co.*: Flat Top (MUMC 311).

Mesodon dentiferus (Binney, 1837).—Populations were found in the eastern part of the state, with an isolated population in Wayne County and another in Wirt County (Fig. 12). *Grant Co.*: SR 91, 11.4 km E of Tucker Co. line (MUMC 465). *Greenbrier Co.*: SR 39, 24 km E of Richwood (MUMC 357). *Nicholas Co.*: SR 39, 1.6 km W of Summersville (MUMC 227). *Pocahontas Co.*: SR 39, west entrance to Monongahela National Forest (MUMC 206); Beartown State Park (MUMC 568); SR 39, 11.2 km W of Cranberry Glades (MUMC 617). *Wayne Co.*: Cabwaylingo State Park (MUMC 290).

Mesodon pennsylvanicus (Green, 1827).—This species was found most frequently in the northern part of the state, with two isolated southern populations (one each in Monroe and Wayne counties) (Fig. 13). *Ohio Co.*: SR 2, 1.6 km E of Warwood (MUMC 262). *Wayne Co.*: SR 75, Lavalette (MUMC 97).

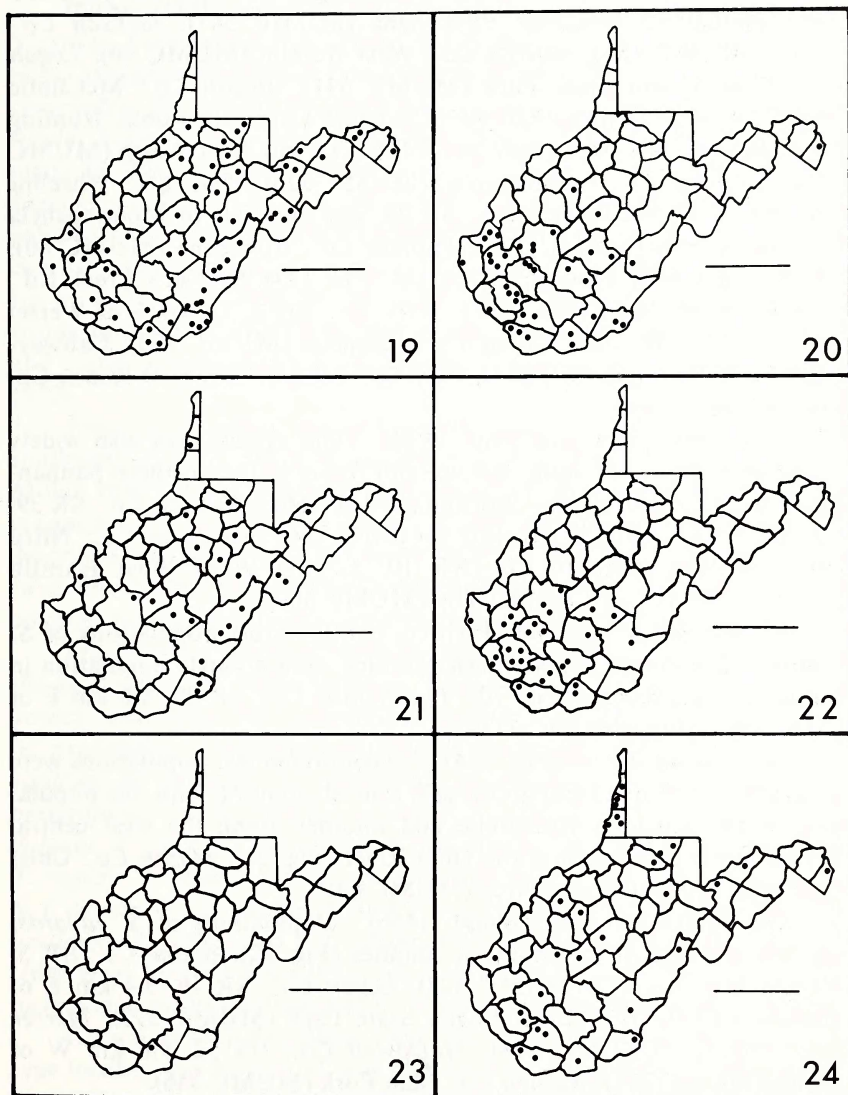
Mesodon mitchellianus (Lea, 1839).—The populations of *M. mitchellianus* were widely scattered throughout the state, with the heaviest concentration in the northern panhandle (Fig. 14). Other scattered populations were found in the southern and central counties, with one population in westernmost Wayne County. *Boone Co.*: SR 3, 4.6 km E of US 119 (MUMC 431, 497). *Clay Co.*: Elkhurst (MUMC 116). *Ohio Co.*: Wheeling (MUMC 245); CR 15, 1.6 km E of Wheeling at Petes Creek (MUMC 252); SR 2, 1.6 km E of Warwood (MUMC 263). *Summers Co.*: SR 3, 3.4 km E of Bluestone Dam (MUMC 498). *Wayne Co.*: SR 75, Lavalette (MUMC 106).

Mesodon clausus (Say, 1821).—Three widely separated populations of *M. clausus* were found (Fig. 15). *Wayne Co.*: SR 75, Lavalette (MUMC 195).

Mesodon rugeli (Shuttleworth, 1852).—Populations of *M. rugeli* were found only in the southern counties (Fig. 16). *Fayette Co.*: US 60, 7.5 km W of Gauley Bridge (MUMC 218).

Mesodon inflectus (Say, 1821).—Only one *M. inflectus* population has been found in West Virginia (Fig. 17), and represents a new state record. *Fayette Co.*: US 60, 7.5 km W of Gauley Bridge (MUMC 219).

Stenotrema hirsutum (Say, 1817).—*Stenotrema hirsutum* is the most widely distributed species of the genus in West Virginia (Fig. 18). *Barbour Co.*: Audra State Park (MUMC 605). *Boone Co.*: Peytona



Figs. 19-23. County distributions of *Stenotrema* in West Virginia. 19, *S. fraternum*; 20, *S. stenotrema*; 21, *S. leai*; 22, *S. edwardsi*; 23, *S. barbigerum*. Fig. 24. County distribution of *Allogona profunda* in West Virginia.

(MUMC 487); SR 3, 4.6 km E of US 119 (MUMC 493). *Brooke Co.*: Bethany (MUMC 247). *Cabell Co.*: 8342 Big Seven Mile Rd. (MUMC 42); Kiwanavista Roadside Park, Ona (MUMC 547). *Jackson Co.*: Ripley (MUMC 156). *Lincoln Co.*: West Hamlin (MUMC 90). *Logan Co.*: Chief Logan State Park (MUMC 591). *Mason Co.*: McClintic Wildlife Refuge Station (MUMC 62); Chief Cornstalk Public Hunting Area (MUMC 66). *McDowell Co.*: US 52, 9.6 km W of Welch (MUMC 706). *Nicholas Co.*: Summersville (MUMC 226). *Ohio Co.*: Wheeling (MUMC 244). *Pocahontas Co.*: SR 39, east entrance to Monongahela National Forest (MUMC 208). *Putnam Co.*: Hurricane (MUMC 80); SR 34, 3 km N of Kanawha River (MUMC 143); Clymer's Creek Rd., 4.8 km off SR 34 (MUMC 181). *Tyler Co.*: SR 2, 3.4 km S of Wetzel Co. line (MUMC 266). *Wayne Co.*: Lavalette (MUMC 203); Cabwaylingo State Park (MUMC 204). *Wirt Co.*: SR 14, 4 km N of Roane Co. line (MUMC 179).

Stenotrema fraternum (Say, 1824).—This species was also widely distributed across the state, but was not found in the northern panhandle (Fig. 19). *Harrison Co.*: Saltwell (MUMC 608). *Jackson Co.*: SR 39, 2.4 km W of Putnam Co. line (MUMC 124). *Kanawha Co.*: Nitro (MUMC 121). *Lincoln Co.*: SR 10, 3.2 km W of West Hamlin (MUMC 87). *Mercer Co.*: Flat Top (MUMC 304).

Stenotrema stenotrema (Pfeiffer, 1842).—Most populations of *S. stenotrema* occur in the southern counties, with a single population in the eastern panhandle (Fig. 20). *Pocahontas Co.*: SR 39, 4.8 km E of Cranberry Glades (MUMC 372).

Stenotrema leai (Binney, 1841).—*Stenotrema leai* populations were generally distributed through the east central counties, with one population in the northern panhandle and another along the west central border in the floodplain of the Ohio River (Fig. 21). *Mason Co.*: Chief Cornstalk Public Hunting Area (MUMC 64).

Stenotrema edwardsi (Bland, 1856).—Populations of *S. edwardsi* are concentrated in the southern counties (Fig. 22). *Boone Co.*: SR 3, 3.4 km E of US 119 (MUMC 423). *Logan Co.*: SR 10, 3.4 km E of Davin (MUMC 393); Chief Logan State Park (MUMC 592). *Mercer Co.*: Flat Top (MUMC 318). *McDowell Co.*: US 52, 9.6 km W of Welch (MUMC 707). *Raleigh Co.*: Slab Fork (MUMC 346).

Stenotrema barbigerum (Redfield, 1856).—A single population of this species was found in southern West Virginia (Fig. 23) and is a new state record. *Mercer Co.*: Flat Top (MUMC 303).

Allogona profunda (Say, 1821).—Populations of *A. profunda* are widely distributed over the state (Fig. 24). *Ohio Co.*: SR 2, 1.6 km E of Warwood (MUMC 258).

DISCUSSION

Pilsbry (1940) reported 12 polygyrid species in four genera in West Virginia: *Stenotrema stenotrema*, *S. edwardsi*, *S. hirsutum*, *S. fraternum*, *Mesodon thyroideus*, *Triodopsis tridentata*, *T. t. juxtidentis*, *T. platysayoides*, *T. rugosa*, *T. albolabris*, *T. dentifera*, and *Allogona profunda*. Four of these were described as new species from collections made in West Virginia. *Triodopsis platysayoides* was described from specimens collected by S. T. Brooks in 1933 at Cooper's Rock, Monongalia County. Hubricht (1972) placed this snail on his endangered species list, and no populations could be located during this study. Its status as endangered may be the result of a restricted range, or of the spring droughts of the 1970s that reduced many land snail populations and could have caused the extirpation of localized colonies (Hubricht 1972).

Triodopsis rugosa was first collected from a deep ravine, 1.6 km southwest of Blair, Blair Mountain, Logan County (Brooks and MacMillan 1940). It was originally described as *T. tridentata rugosa* and the taxonomy was changed by Pilsbry (1940). *Triodopsis fraudulenta* was described by Pilsbry (1894) from Morgan County and *Stenotrema edwardsi* was first collected from the mountains of Fayette or Greenbrier counties by Bland, who described the species in 1858 (Pilsbry 1940).

MacMillan (1949) published the latest report to specifically discuss the land snails of West Virginia. Twenty-seven Polygyridae, in three genera, were reported: *Mesodon albolabris albolabris*, *M. a. dentatus*, *M. profundus*, *M. mitchellianus*, *M. thyroideus*, *M. zaletus*, *M. pennsylvanicus*, *M. sayanus*, *M. dentiferus*, *M. clausus*, *M. appressus*, *M. a. perigraptus*, *Triodopsis platysayoides*, *T. fraudulenta fraudulenta*, *T. f. vulgata*, *T. rugeli*, *T. denotata*, *T. tridentata tridentata*, *T. t. juxtidentis*, *T. rugosa*, *T. fallax*, *Stenotrema edwardsi*, *S. fraternum fraternum*, and *S. f. cavum*. I was unable to find *T. platysayoides*, *M. a. dentatus*, *T. t. juxtidentis*, *T. fallax*, and *S. f. cavum*. Other new taxa have been reported from West Virginia since the work of MacMillan, and these new species have added to the confusion as to which species are present in the state.

Grimm (1971) described *Stenotrema simile* which, although the type locality was Maryland, was also reported to be found in Monongalia, Nicholas, and Pocahontas counties, West Virginia. He noted that the chief differences between *S. simile* and *S. hirsutum* were the larger size of *S. simile*, its coarser granulations on the embryonic whorls, and other shell sculpture characteristics best seen with the scanning electron microscope. Grimm (1974) also found intermediate populations of *T. juxtidentis juxtidentis* and *T. j. discoidea* near the New River Gorge at Hinton, Summers County. Vagvolgyi (1969) found similar populations

in Clay County. None of these taxa (some as subspecies) could be found during my study.

Hubricht (1976) described *Mesodon panselenus* from specimens collected at Scotford, Clay County; Hernshaw, Kanawha County; Blair, Logan County; and Jaeger, McDowell County. He reported that the new species was similar to, and easily confused with, *M. perigraptus*, but differed from it in having a more depressed shell and shorter penis. My visits to the type locality and other collection localities listed by Hubricht for *M. panselenus* failed to reveal specimens referable to this species.

Hubricht (1974) placed *Mesodon burringtoni* Hubricht in synonymy with *M. mitchellianus*. He noted that the first specimens of *M. burringtoni* were collected in southwest Virginia and at two localities in the Kanawha-New River valleys of West Virginia. However, as more material became available, especially larger shells, no apparent differences could be found between the two species. In the same report, Hubricht noted that topotypes of *Stenotrema hirsutum* were indistinguishable from *S. burringtoni* Grimm. Such taxonomic gyrations and the inability to clearly define some species in the family Polygyridae may account for some of the difficulties in accurately assessing the polygyrid fauna of West Virginia.

Briscoe (1963) reported 8 species of Polygyridae in Jefferson County, West Virginia, and reported populations of *Mesodon thyroideus bucculenta* (Gould, 1848) from 11 localities within the county. However, I could not locate populations of this subspecies during my study. Pilsbry (1940) described the zoogeographic range of *M. t. bucculenta* to extend from Wilmington, North Carolina south to Georgia and west to Arkansas, Oklahoma, and Texas. He also noted that specimens referable to *M. t. bucculenta* from Pennsylvania and other northern states are better referred to *M. t. thyroideus*.

Triodopsis multilineata is found only on Blennerhassett Island in the Ohio River, Wood County, West Virginia (Taylor and Counts 1976). No specimens of this species were collected from the West Virginia shore of the river during my study.

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